

*BS CONJ*  
ID NO: 6), ATPT8 (SEQ ID NO: 12) and ATPT12 (SEQ ID NO: 17)) and the *Synechocystis* sequences (slr1736 (SEQ ID NO: 37), slr0926 (SEQ ID NO: 32), slr1899 (SEQ ID NO: 33), slr0056 (SEQ ID NO: 34), and slr1518 (SEQ ID NO: 35)). The comparisons are presented in Table 4 below. Provided are the percent identities, percent similarity, and the percent gap. The alignment of the sequences is provided in Figure 22.

**IN THE CLAIMS:**

*Please cancel claims 5-10 without prejudice or disclaimer to the underlying subject matter.*

*Please amend claims 13-19 as shown below:*

*Sub C4*  
13. (Amended) A nucleic acid construct comprising as operably linked components, a transcriptional initiation region functional in a host cell, a nucleic acid sequence encoding a prenyltransferase, and a transcriptional termination region.

*BS*  
14. (Amended) A nucleic acid construct according to Claim 13, wherein said nucleic acid sequence encoding a prenyltransferase is obtained from an organism selected from the group consisting of a eukaryotic organism and a prokaryotic organism.

15. (Amended) A nucleic acid construct according to Claim 14, wherein said nucleic acid sequence encoding a prenyltransferase is obtained from a plant source.

16. (Amended) A nucleic acid construct according to Claim 15, wherein said nucleic acid sequence encoding a prenyltransferase is obtained from a source selected from the group consisting of *Arabidopsis*, soybean and corn.

17. (Amended) A nucleic acid construct according to Claim 13, wherein said nucleic acid sequence encoding a prenyltransferase is obtained from *Synechocystis*.

*sub C5* > 18. (Amended) A plant cell comprising the construct of Claim 13.

*Bl* 19. (Amended) A method for the alteration of the tocopherol content in a host cell, comprising transforming said host cell with a construct comprising as operably linked components, a transcriptional initiation region functional in a host cell, a nucleic acid sequence encoding a prenyltransferase, and a transcriptional termination region.

*sub D* > Please add new claims 34 - 41:

*Sub C7* > 34. (New) The DNA sequence of Claim 4 wherein said prenyltransferase is from *Arabidopsis*.

*Sub C7* > 35. (New) The DNA sequence of Claim 34 wherein said prenyltransferase is encoded by a sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 12 and 17.

*Sub C7* > 36. (New) The DNA sequence of Claim 4 wherein said prenyltransferase is from *corn*.

*Bl* 37. (New) The DNA sequence of Claim 36 wherein said prenyltransferase is encoded by a sequence which includes the EST of SEQ ID NO: 1.

*Sub C7* > 38. (New) The DNA sequence of Claim 36 wherein said prenyltransferase is encoded by a sequence selected from the group consisting of SEQ ID NOs: 25-29 and 31.

*Sub C7* > 39. (New) The DNA sequence of Claim 4 wherein said prenyltransferase is from *soybean*.

40. (New) The DNA sequence of Claim 39 wherein said prenyltransferase is encoded by a sequence which includes the ESTs of the group consisting of SEQ ID NOs: 1 and 3.

41. (New) The DNA sequence of Claim 39 wherein said prenyltransferase is encoded by a sequence selected from the group consisting of SEQ ID NOs: 19-23.